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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/616,140	07/13/2000	David Allen Coleman	AUS9-2000-0257-US1	4751
35525	7590	05/20/2005	EXAMINER	
IBM CORP (YA)			BLOUNT, STEVEN	
C/O YEE & ASSOCIATES PC				
P.O. BOX 802333			ART UNIT	
DALLAS, TX 75380			PAPER NUMBER	
			2661	

DATE MAILED: 05/20/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/616,140

Applicant(s)

COLEMAN, DAVID ALLEN

Examiner

Steven Blount

Art Unit

2661

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 January 2005.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 - 49 is/are pending in the application.
- 4a) Of the above claim(s) 23 - 46 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1 - 22 and 47 - 49 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 340-112005 3/11/05 - 3/10/05
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____

DETAILED ACTION

1. Prosecution is reopened in view of the new rejections presented below.

Specification

2. The abstract of the disclosure is objected to because its length exceeds 150 words. Correction is required. See MPEP § 608.01(b).
3. The specification is objected to because it is not written in such particularity as to enable one of ordinary skill in the art to make and use the invention without involving extensive experimentation. See MPEP, section 608.01(g), wherein it is stated, "An applicant is ordinarily permitted to use his or her own terminology, as long as it can be understood." The examiner believes that the use of the phrase "pseudo-terminal" (specification, page 12 lines 20+, page 13, lines 1+ and 20+; page 14, lines 5+), is not described with sufficient particularity (all that is stated is that it is established and used), given its apparent importance in implementing the invention, and the fact that it is an obscure term in the art, appearing in only 42 patents.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
5. Claims 1 – 22 and 47 – 49 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

With regard to claims 1, 9, 13, 14, and 15, the claims do not particularly point out the process being claimed. For example, with regard to claims 1 and 9, what are the

Art Unit: 2661

input and output which are received from the application data stream? What is the received input from the devices? What is the output to the device? With regard to claim 13, what is the request? Where is the data stream splitter table located? What is the output? How are these method steps structurally implemented? With regard to claim 14, again, what is the output? What is the input? With regard to claim 15, how is the method related to a construct for carrying it out? With regard to claims 47 - 49, again, how is the method related to a construct for carrying it out, and what are the input and output related to? Also, with respect to claims 47 – 49, instead of input to an “application”, it should be input to an “application data stream”.

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. Claims 1 – 3, 8, and 10 - 11 are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. patent 5,491,508 to Friedell et al.

With regard to claim 1, Friedell et al teach receiving input from device 10 (see figure 4 and front of patent) to an application data stream (the channels between WS and HUB, and ultimately between the HUBs. See also col 3, lines 53+). Friedell also teaches receiving an output from the data streams based on the data input from the WS, as well as input from the plurality of other work stations associated with different HUBs. See col 3 lines 60+ and also col 4 lines 13+. It is further noted that this output is

provided to the work stations at substantially the same time, in view of the fact that the signals would need to be nearly simultaneous for a conference to occur.

With regard to claim 2, note that a splitter 42 (fig 3) is described in col 4 lines 10+.

With regard to claim 3, it is noted that the data stream splitter 42 situated within hub 14 is "dynamically constructed" by the system through the act of its implementation when it is desired that a conference be conducted, as is discussed in column 4, lines 5 to 30.

With regard to claim 8, the CPU 144 described in col 6 lines 40+ can be considered to be "the stream splitter manager", because it responds to workstation requests and thereafter allocates channels among the workstations, effectively "managing" the data stream.

With regard to claim 10, the user is unaware of the hub 14 and its constituent components, including the splitter and its "manager."

With regard to claim 11, see display 22 in figure 2.

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claims 47 – 49 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. patent 5,491,508 to Friedell et al.

With regard to claim 47, Friedell et al teach receiving input from workstations 10 to a data stream connecting two hubs 14, 14, wherein the data from the workstations is combined to produce a combined output signal, as is discussed in column 3 lines 45+, and shown in figure 3 (see member 40). Also as described in 3 lines 45+, a combined signal 36 is sent back to the work stations. It is not, however, explicitly stated that these signals are *simultaneously* output to each of the plurality of devices.

One of ordinary skill in the art would have, however, found it obvious, at the time of the invention, to have *simultaneously* output the combined signals to each of the plurality of devices in Friedell et al in view of the fact that in a conference system such as that taught in Friedell et al, it is desireable to carry out the conversation in a manner in which it appears as if it is occurring in real time, and outputting the combined signals simultaneously would facilitate the simulation of this mode of communication.

With regard to claim 48, Friedell et al teach receiving input to the data stream connecting hubs 14, 14; thereafter, a combined signal is produced as mentioned above and discussed in col 3 lines 45+.

It is not, however, explicitly stated that these signals are output to each of the plurality of devices at *substantially a same time*.

One of ordinary skill in the art would have, however, found it obvious, at the time of the invention, to have output the combined signals to each of the plurality of devices in Friedell et al at *substantially a same time*, in view of the fact that in a conference system such as that taught in Friedell et al, it is desireable to carry out the conversation in a manner which occurs in real time (or nearly so) so that it appears as if the

conferees are actually talking with each other, and outputting the combined signals at substantially a same time would facilitate the simulation of this mode of communication.

With regard to claim 49, Friedell et al teach receiving input to the data stream connecting hubs 14, 14; thereafter, a combined signal is produced as mentioned above and discussed in col 3 lines 45+. It is noted that Friedell et al also teach displaying output based on the combined input, said displaying occurring via member 22.

It is not, however, explicitly stated that these signals are displayed on each of the plurality of devices at *substantially a same time*.

One of ordinary skill in the art would have, however, found it obvious, at the time of the invention, to have output the combined signals to each of the plurality of devices in Friedell et al at and thereafter displayed them *at substantially a same time*, in view of the fact that in a conference system such as that taught in Friedell et al, it is desirable to carry out the conversation and display it in a manner which occurs in real time so that it appears as if the conferees are actually talking with each other, and outputting the signals and displaying them at substantially a same time would facilitate this mode of communication.

10. Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. patent 5,491,508 to Friedell et al as applied above to claims 1 - 3, 8, 10 - 11, and further in view of U.S. patent 6,327,276 to Robert et al.

Friedell et al teach the invention as discussed above, but do not teach the use of a buffer for storing the data prior to sending it to the client. Robert et al teach the use of a buffer in a conferencing system, for synchronizing the packets. See col 2 lines 55+.

It would have been obvious to one of ordinary skill in the art at the time of the invention to have provided Friedell et al with a buffer for sending the data to the clients, in light of the teachings of Robert et al, in order to synchronize the packet data and prevent jitter.

11. Claims 7 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. patent 5,491,508 to Friedell et al as applied above to claims 1 – 3, 8, 10 – 11, and 13, and further in view of U.S. patent 6,625,643 to Colby et al.

With regard to claim 7, Friedell et al teach the invention as described above with respect to independent claim 1. Friedell et al also teach generating a data stream splitter, as discussed above with respect to claim 3. Friedell et al do not, however, teach “adding an entry to a data stream splitter table for the device and the data stream splitter” (lines 5 – 6 of claim 7).

Colby et al teach assigning resources to clients, wherein a “Topology Manager will create tables”, and wherein in these tables, the “Topology Manager will mark the resources used as it assigns them to a scheduled event.” See col 7 lines 22+, col 7 lines 43+, and col 9 lines 15 – 30.

It would have been obvious to one of ordinary skill in the art at the time of the invention to have provided Friedell et al with a table with an entry for clients indicating their desirability for receiving resources, in light of the teachings of Colby et al, in order to provide a means for allowing the resource manager (ie, CPU) in Friedell et al to respond to requests from work stations in an orderly and fair manner.

With regard to claim 13, the workstations request access to the data stream between the hubs 14, wherein the access is provided via the data stream splitter, as discussed above. The output is provided in a near-real time in order to facilitate the conference. Also, the combined output is based on the workstations own input, as well as input from the other workstations. Friedell et al does not, however, explicitly teach adding an entry to a data stream splitter table. This is, however, taught in Colby et al. One of ordinary skill in the art would have found it obvious at the time of the invention to have added a entry to a data stream table in Friedell et al in light of the teachings of Colby et al in order to respond to requests from workstations in a fair and orderly manner.

12. Claims 6, 15 – 19, and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. patent 5,491,508 to Friedell et al as applied above to claims 1 - 3, 8, 10, 11, 13, and further in view of either one of: U.S. patent 6,538,704 to Grabb et al, or U.S. patent 6,625,643 to Colby et al.

With regard to claim 6, Friedell et al teach the invention as described above, including having a CPU (ie, resource manager) in a hub respond to requests for channels and then allocate them by keeping track of unused channels and assigning them on an as needed basis, wherein an arbitration basis is used when the number of requests exceeds the number of available channels. See col 6, lines 57+. Friedell et al also teach sending data from the data stream to the client device, and from the client device to the data stream as discussed above in order to allow for the conference to proceed.

Friedell et al does not, however, teach *cycling* through entries in a table, where each table entry in the table identifies a client workstation, such that the data will be sent to the client workstation based on the said *cycling*.

Grabb et al teach assigning data channels by cycling through entries in a channel occupancy database. See col 2 lines 9+. Colby et al teach assigning resources by cycling through a resource table in a round - robin fashion. See col 7 lines 40+ and also col 7 lines 23+, col 8 lines 58+, and col 9 lines 25+.

It would have been obvious to one of ordinary skill at the time of the invention to have cycled through an entry in a stream splitter table in Friedell et al in light of the teachings of either one of Grabb et al, or Colby et al, in order to provide a means for allowing the client workstations in Friedell to access the conference data stream and participate in the conference in an orderly and fair manner.

With regard to claim 15, Friedell et al teach the invention as described above, including having a CPU (splitter manager) in a hub respond to requests for channels and then allocating them by keeping track of unused channels and assigning them on an as needed basis, wherein an arbitration basis is used when the number of requests exceeds the number of available channels. See col 6, lines 57+. Friedell et al also teach sending data from the data stream to the client device, and from the client device to the data stream as discussed above in order to allow for the conference to proceed.

Friedell et al does not, however, teach *cycling* through entries in a table, where each table entry in the table identifies a client workstation, such that the data will be sent to the client workstation based on the said *cycling*.

Grabb et al teach assigning data channels by cycling through entries in a channel occupancy database. See col 2 lines 9+. Colby et al teach assigning resources by cycling through a resource table in a round - robin fashion. See col 7 lines 40+ and also col 7 lines 23+, col 8 lines 58+, and col 9 lines 25+. It would have been obvious to one of ordinary skill at the time of the invention to have cycled through an entry in a stream splitter table in Friedell et al in light of the teachings of either one of Grabb et al, or Colby et al, in order to provide a means for allowing the client workstations in Friedell to access the conference data stream and participate in the conference in an orderly and fair manner.

With regard to claim 16, the purpose of the "splitter tables" in Grabb et al and Colby is to ensure fair access for the clients.

With regard to claim 17, the data stream between the hubs is shared, while the work station each have private communication lines 32, 34.

With regard to claims 18, see the discussion of the data stream splitter 42 above and shown in figure 3.

With regard to claim 19, the data stream splitter is dynamically constructed as is discussed with respect to claim 3 above.

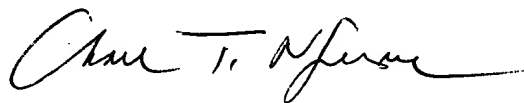
With regard to claim 22, although Friedell et al do not explicitly teach the use of *non - blocking raw* data being sent to the data stream, it would have been obvious to one of ordinary skill in the art at the time of the invention to have used non-blocking raw data in Friedell et al in order to prevent the conference from having unwanted pauses during its operation.

Art Unit: 2661

9. Claims 4, 5, 9, 14, and 20 - 21 are objected to as being dependent upon rejected claims, but would be allowable if rewritten to include the limitations of the base claims and any intervening claims, and if rewritten to overcome the 112 second paragraph rejections.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Steven Blount whose telephone number is 571-272-3071. The examiner can normally be reached on M-F 9:00 - 5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Chau Nguyen, can be reached on 571-272-3126. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



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